

FILE 'REGISTRY' ENTERED AT 10:42:44 ON 21 OCT 2009

EXP TAMINARI/CN

EXP LAMINARI/CN

EXP LAMINARIPENTAOSE/CN

L1 2 S E3 OR E9

FILE 'HCAPLUS' ENTERED AT 10:43:35 ON 21 OCT 2009

L2 7 S L1/THU

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=> file registry
COST IN U.S. DOLLARS          SINCE FILE          TOTAL
                                ENTRY          SESSION
FULL ESTIMATED COST          0.22          0.22
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STRUCTURE FILE UPDATES:  19 OCT 2009  HIGHEST RN 1189088-37-6
DICTIONARY FILE UPDATES: 19 OCT 2009  HIGHEST RN 1189088-37-6
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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

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 predicted properties as well as tags indicating availability of
 experimental property data in the original document. For information
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdnc/properties.html>

```
=> exp taminari/cn
E1      1      TAMIFLU-FREE/CN
E2      1      TAMIN/CN
E3      0 -->  TAMINARI/CN
E4      1      TAMIRIN/CN
E5      1      TAMIRIN ACETATE/CN
E6      1      TAMIRITE/CN
E7      1      TAMITINOL/CN
E8      1      TAMIXIZE 1/CN
E9      1      TAMIYA COLOR ACRYLIC MINI X 8 LEMON YELLOW/CN
E10     1      TAMIYA COLOR CLEAR/CN
E11     1      TAMIYA COLOR MINI LEMON YELLOW/CN
E12     1      TAMIYA COLOR XF 1/CN

=> exp laminari/cn
E1      1      LAMINARASE RESISTANCE PROTEIN (SACCHAROMYCES BAYANUS STRAIN
NBRC-1948 GENE LRE1 FRAGMENT)/CN
E2      1      LAMINARASE RESISTANCE PROTEIN (SACCHAROMYCES BAYANUS STRAIN
NBRC-2031 GENE LRE1 FRAGMENT)/CN
E3      0 -->  LAMINARI/CN
E4      1      LAMINARIA CLOUSTONII, EXT./CN
E5      1      LAMINARIA DIGITATA, EXT./CN
E6      1      LAMINARIA HYPERBOREA, EXT./CN
E7      1      LAMINARIA JAPONICA, EXT./CN
E8      1      LAMINARIA PALLIDA, EXT./CN
E9      1      LAMINARIA SACCHARINA, EXT./CN
E10     1      LAMINARIA, EXT./CN
E11     1      LAMINARIBIASE/CN
E12     1      LAMINARIBIITOL/CN
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=> exp laminaripentaose/cn
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E1      1      LAMINARIOSE/CN
E2      1      LAMINARIPENTAHYDROLASE/CN
E3      1 -->  LAMINARIPENTAPOSE/CN
E4      1      LAMINARIPENTAPOSE ALDITOL/CN
E5      1      LAMINARIPENTAPOSE SULFATE/CN
E6      1      LAMINARIPENTAPOSE, HEPTADECACETATE, B-/CN
E7      1      LAMINARIPENTOSE/CN
E8      1      LAMINARITETRAONIC ACID/CN
E9      1      LAMINARITETRAOSE/CN
E10     1      LAMINARITETRAOSE ALDITOL/CN
E11     1      LAMINARITETRAOSE, TETRADECACETATE/CN
E12     1      LAMINARITETROSE/CN

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=> s e3 or l9

L9 NOT FOUND

The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s e3 or e9

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          1 LAMINARIPENTAPOSE/CN
          1 LAMINARITETRAOSE/CN
L1       2 LAMINARIPENTAPOSE/CN OR LAMINARITETRAOSE/CN

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=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	11.18	11.40

FILE 'HCAPLUS' ENTERED AT 10:43:35 ON 21 OCT 2009

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FILE COVERS 1907 - 21 Oct 2009 VOL 151 ISS 17

FILE LAST UPDATED: 20 Oct 2009 (20091020/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1/thu

126 L1

L2 1177712 THU/RL
7 L1/THU
(L1 (L) THU/RL)

=> d 12 1-7 ti abs bib

L2 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN
TI Synthesis, immunological activities, and scavenging ability toward
superoxide anion of (1 → 3)-β-D-pentaglucoside and its
epoxyalkyl derivatives
AB Two epoxyalkyl (1→3)-β-D-pentaglucosides were synthesized via
acetylation, glycosidation, oxidation, and deacetylation of
(1→3)-β-D-pentaglucoside. The immunol. activities (superoxide
anion production activity, phagocytic activity, and lymphocyte proliferation)
and scavenging ability toward superoxide anion of
(1→3)-β-D-pentaglucoside and its epoxyalkyl derivs. were
compared. Superoxide anion released from human blood monocytes was
measured by the reduction of ferricytochrome c. Phagocytosis by peritoneal
macrophages was detected through a teal ingesting that measured the
chicken red blood cells (CRBC). Lymphocyte proliferation was determined by the
MTT method. The scavenging ability toward superoxide anions was evaluated
by means of chemiluminescence (CL). The results showed that epoxyalkyl
(1→3)-β-D-pentaglucosides had a little higher immunol.
activity and scavenging ability toward superoxide anion than
(1→3)-β-D-pentaglucoside, which indicated that the reducing
end of the oligoglucosides was quite important for maximum biol. activity.
AN 2005:464987 HCAPLUS <<LOGINID:20091021>>
DN 143:90258
TI Synthesis, immunological activities, and scavenging ability toward
superoxide anion of (1 → 3)-β-D-pentaglucoside and its
epoxyalkyl derivatives
AU Huang, Gang-Liang; Liu, Man-Xi; Mei, Xin-Ya; Wang, Ying
CS Key Laboratory of Biomedical Photonics of Ministry of Education, Huazhong
University of Science and Technology (East Campus), Wuhan, 430074, Peop.
Rep. China
SO Bioorganic & Medicinal Chemistry (2005), 13(12), 3873-3877
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Ltd.
DT Journal
LA English
OS CASREACT 143:90258
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN
TI Therapeutical treatment with oligo-beta- (1,3) -glucans, drugs used in
said treatment
AB A therapeutical method comprising administration of a composition comprising an
amount of oligo-β-(1,3)-glucan and a pharmaceutically acceptable
carrier, to a human being or to a warm-blood animal suffering from a
disease selected from the group consisting in a tumor, a cancer, a viral
disease, a bacterial disease, a fungal disease, a disease of the immune
system, an auto-immune disease or a disease related to a deficiency of
immunostimulation, wherein the amount of oligo-β-(1,3)-glucan is
effective to treat the disease.
AN 2005:259652 HCAPLUS <<LOGINID:20091021>>
DN 142:309889
TI Therapeutical treatment with oligo-beta- (1,3) -glucans, drugs used in
said treatment
IN Yvin, Jean-Claude; Jamois, Frank; Vetvicka, Vaclav

PA Fr.
 SO U.S. Pat. Appl. Publ., 20 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050065114	A1	20050324	US 2003-668665	20030923
	WO 2005027936	A2	20050331	WO 2004-EP10995	20040916
	WO 2005027936	A3	20050728		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1663258	A2	20060607	EP 2004-787077	20040916
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
PRAI	US 2003-668665	A	20030923		
	WO 2004-EP10995	W	20040916		
OSC.G	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)			

L2 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN
 TI Characterisation of the Anticoagulant Properties of a Range of Structurally Diverse Sulfated Oligosaccharides
 AB In this study, 17 sulfated oligosaccharides were assessed by the activated partial thromboplastin time (APTT) test for their anticoagulant activity and nine were found to exhibit significant activity. Chain length, monosaccharide makeup, and linkage all appear to be critical factors in determining anticoagulant activity, with the most active compds. being five- to sixfold less potent than unfractionated heparin (UFH). Phosphomannopentaose sulfate (PI-88), one of the most active sulfated oligosaccharides and a promising anticancer drug, was selected for further study. PI-88 gave a more linear APTT dose-response curve and displayed less patient-to-patient variation than UFH, with its activity being neutralized by protamine sulfate. However, PI-88 showed considerable species-to-species variation in its anticoagulant effect. It was found that PI-88 acted as an anticoagulant by enhancing the ability of heparin cofactor II (HCII) to inhibit thrombin, and did not act via antithrombin III (AT-III) in either inhibiting Factor Xa or thrombin. PI-88 also mildly prolonged the prothrombin time (PT), while it had no platelet pro-aggregatory activity, nor did it demonstrate direct fibrinolytic activity. Thus, PI-88 represents a potential antithrombotic agent deserving further study.
 AN 2001:651835 HCAPLUS <<LOGINID::20091021>>
 DN 136:63816
 TI Characterisation of the Anticoagulant Properties of a Range of Structurally Diverse Sulfated Oligosaccharides
 AU Wall, D.; Douglas, S.; Ferro, V.; Cowden, W.; Parish, C.
 CS Research and Development Unit, Australian Red Cross Blood Service-Victoria, Melbourne, Australia
 SO Thrombosis Research (2001), 103(4), 325-335
 CODEN: THBRAA; ISSN: 0049-3848

PB Elsevier Science Inc.
DT Journal
LA English

OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN

TI Oligosaccharides, a process for preparation thereof and pharmaceutical combination containing the same compounds

AB This invention relates to the oligosaccharides with enhancing immune and antitumor activity. The described oligosaccharides have a main chain consisting of 3-14 sugar residues and side chains consisting of 0-4 sugar residues. The sugar residues are either the same or different. The described sugar residues on the main chain are linked through 1-3 β or 1-4 β linkage. The described side chains are linked with the main chain through 1-6 β or 1-6 α linkage. The described terminal group is hydroxyl or Cl-12 alkoxyl group. This invention also involves the preparation of the described oligosaccharides, in the process 1,2:5,6-di-O-isopropylidene glucose is used as the starting material and the glycosyl acceptor and acylated sugars are used as the glycosyl donors for the preparation of said oligosaccharide. In addition, the pharmaceutical composition of the described oligosaccharides and their use as enhancing immune and antitumor agents, and as health maintaining products are involved.

AN 2001:453081 HCAPLUS <<LOGINID::20091021>>
DN 135:33006

TI Oligosaccharides, a process for preparation thereof and pharmaceutical combination containing the same compounds

IN Kong, Fanzuo; Ning, Jun

PA Research Center for Eco-Environmental Sciences, Academia Sinica, Peop. Rep. China

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA Chinese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044263	A1	20010621	WO 2000-CN224	20000807
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CN 1303857	A	20010718	CN 1999-126224	19991216
CN 1129600	C	20031203		
CN 1306003	A	20010801	CN 2000-100376	20000119
CN 1159327	C	20040728		
PRAI CN 1999-126224	A	19991216		
CN 2000-100376	A	20000119		

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN

TI β (1-3)-Glucan diagnostic assays

AB Methods of isolating β (1-3)-glucan or β (1-3)-glucan-containing

organisms in a sample, or of detecting the presence of $\beta(1-3)$ -glucan or $\beta(1-3)$ -glucan-containing organisms in a sample, utilizing binding agents for $\beta(1-3)$ -glucan, such as LacCer, GalCer, globotriaosylceramide and asialoganglioside-GM1, are described. Methods of diagnosing fungal infection, by detecting $\beta(1-3)$ -glucan or $\beta(1-3)$ -glucan-containing organisms, are also described. Antibodies and kits useful in the methods are also disclosed.

AN 1999:405173 HCAPLUS <<LOGINID:20091021>>

DN 131:43592

TI $\beta(1-3)$ -Glucan diagnostic assays

IN Wakshull, Eric M.; Mackin, William M.; Zimmerman, Janet W.; Fiset, Leslie W.

PA Alpha-Beta Technology, Inc., USA

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9931510	A1	19990624	WO 1998-US24014	19981112
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6084092	A	20000704	US 1997-990125	19971212
	CA 2314342	A1	19990624	CA 1998-2314342	19981112
	AU 9913967	A	19990705	AU 1999-13967	19981112
	AU 740158	B2	20011101		
	EP 1038180	A1	20000927	EP 1998-957794	19981112
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	JP 2002508518	T	20020319	JP 2000-539356	19981112
PRAI	US 1997-990125	A	19971212		
	US 1997-797696	A2	19970131		
	WO 1997-US7445	A2	19970501		
	WO 1998-US24014	W	19981112		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN

TI Immunosuppressants containing heated carbohydrates having $\beta(1,3)$ -glucoside linkage

AB Immunosuppressants contain heat-treated linear carbohydrates having $\beta(1,3)$ -glucoside linkage, e.g. curdlan hydrolyzates, as active ingredients. The action of immunosuppressants is based on suppression of lymphocytes. Curdlan hydrolyzates, prepared by decomposition of curdlan with HCO₂H and subsequent heating in H₂O at 100° for 10 min, significantly decreased nos. of viable B- and T-lymphocytes in incubation under stimulation with LPS and ConA, resp.

AN 1998:479907 HCAPLUS <<LOGINID:20091021>>

DN 129:104215

OREF 129:21281a,21284a

TI Immunosuppressants containing heated carbohydrates having $\beta(1,3)$ -glucoside linkage

IN Kajikawa, Akihiro; Kamenno, Masaki; Murosaki, Shinji; Kusaka, Hiroaki
PA Takeda Chemical Industries, Ltd., Japan; Takeda Shokuhin Kogyo K. K.
SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10194976	A	19980728	JP 1997-6524	19970117
	JP 4091137	B2	20080528		
PRAI	JP 1997-6524		19970117		
OSC.G	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)			

L2 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2009 ACS ON STN

TI Structure and activity of sulfated alkyl oligosaccharide having potent anti-HIV activity

AB Hydrolysis in dilute HCl/DMSO of curdlan gave mixture of laminari-oligosaccharides, which by column chromatog. with charcoal/EtOH-H₂O gave laminaritetraose (I). Biochem. selective anal. by enzyme of curdlan gave laminaripentaose (II). Treatment of pure I with AcOK/Ac₂O gave peracylated laminaritetraoside (III) (β/α ratio 3.2-3.8), which with alkyl alcs. by SnCl₄ catalyst gave peracetylated alkyl laminaritetraosides, V, VI, VII and VIII in 45, 55, 54 and 28 % yields, resp. Similarly, pure II gave peracetylated laminaripentaoside (IV), which with alkyl alcs. similarly gave peracetylated alkyl laminaripentaosides IX, X, XI, XII and XIII in 50, 54, 47, 55 and 70% yields, resp. Sulfated alkyl laminaritetraosides XIV, XV, XVI and XVII were synthesized by treatment of, V, VI, VII and VIII treated with NaOMe/MeOH, with N-SO₃/Pyridine. Similarly, sulfated alkyl laminaripentaosides XVIII, XIX, XX and XXII were synthesized. The anti-HIV activity of XIV-XXII was measured by using curdlan sulfate as reference. The anti-HIV activity of XIV-XVII decreased with shortening of alkyl portion under 8 of carbonic number. EC₅₀ value of XIV and XV was 24 and 14 μg/mL, resp. EC₅₀ value of XVI and XVII was 3.2 and 3.3 μg/mL, resp., which was significantly lower than that of XVIII-XXII, resp. Structure of laminarioligosaccharides having more than pentasaccharides was important for high potent anti-HIV activity. XVIII and XIX having (+)-2-octyl and (-)-2-octyl portion, especially, both showed similar anti-HIV activity. Cytotoxic effect of all compds. tested was low. Usefulness of laminaripentaosides is discussed as anti-HIV active agents.

AN 1996:353110 HCAPLUS <<LOGINID:20091021>>

DN 125:104236

OREF 125:19219a,19222a

TI Structure and activity of sulfated alkyl oligosaccharide having potent anti-HIV activity

AU Katsuraya, Kaname; Uryu, Toshiyuki

CS Inst. Ind. Sci., Univ. Tokyo, Tokyo, 106, Japan

SO Seisan Kenkyu (1996), 48(3), 165-8

CODEN: SEKEAI; ISSN: 0037-105X

PB Tokyo Daigaku Seisan Gijutsu Kenkyusho

DT Journal

LA Japanese